

TWO CASES OF VOLVULUS OF SMALL INTESTINE.

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I have had under my care two cases of this unusual condition presenting such widely different symptoms that I thought it would be of interest to bring them before you to-night.

The first case, Lizzie M., aged 30, entered the Montreal General Hospital November 16, 1894, complaining of pain in the abdomen and vomiting. For a week previously she had had cramps in the upper part of the abdomen. Two days before admission pain came on in the epigastric and right inguinal regions, becoming more severe until by evening the pain was constant and stabbing in character. The next day vomiting came on and the following day she entered the hospital. Since the beginning of the trouble the bowels have not moved. We found her condition on examination as follows: The skin is of a subicteroid hue and the conjunctivæ are yellowish. She lies on the right side with legs drawn up, but is very restless. Abdomen tense and a little distended, tenderness on pressure, especially in epigastric and hypogastric regions. McBurney's point painful, but not markedly so. No tumour; tympanitic note all over, but liver dulness not obliterated. Temperature 100.6°, pulse 78, respiration 32.

The condition remained about the same until the 19th, when it was decided to operate. The vomiting continued and no movement of the bowels was obtained, although some flatus was passed. During the whole time the distention of the abdomen did not become great, nor was there any tumour to be made out.

The operation was an exploratory incision made in the middle line above the umbilicus. The gall-bladder was found normal, but on withdrawing the small intestine from the abdominal cavity a curious condition of affairs was found. The part first withdrawn was collapsed, then came a deep constriction in the gut, then about three feet of intestine and finally another deep constriction. There were no bands or adhesions and the bowel was drawn out very easily from the abdomen. The large intestine was found much distended, therefore the incision was extended downwards, passing to the left of the umbilicus, in order to permit of the examination of the sigmoid flexure and rectum. Nothing, however, was found to account for this condition and the abdomen was closed. The recovery was uneventful and the

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patient left the hospital on December 19th, thirty days after the operation.

The second case, Wm. R., aged 19, presented a very different clinical picture. On April 21st he complained of a little uneasiness in his bowels with some swelling of the abdomen. During the afternoon he went to stool twice, but noticed nothing unusual. From time to time he had had similar attacks, so did not pay much attention to his sensations. However, while at supper the same evening, about 5.45, he was suddenly seized with intense stinging pain in the abdomen. His brother assisted him upstairs to his bedroom and loosened his clothing. While doing so he noticed that the patient's abdomen was swollen, hard and tender. There had been no vomiting and no diarrhoea. Dr. Drummond saw him soon after and sent for me. When I saw him about 7 o'clock he was lying partly dressed on his bed on the right side with his legs drawn up. His lips were livid and his finger nails were also cyanosed. He was suffering severely and was quite conscious. Any attempt to move him gave great pain, consequently the examination was rather superficial.

The abdomen was greatly distended, very tense and tender. Liver dulness apparent, but note tympanitic elsewhere. There was a history of having been shot in the left side, just below the heart, and from this he dated all his abdominal troubles.

The patient was brought to the hospital and as soon as preparations could be made the abdomen was incised in the middle line below the umbilicus. No signs of peritonitis were found, but the small bowel was collapsed. After withdrawing about three feet of this a distended portion was come to—about eight inches in length—with a deep constriction at each end; beyond this the bowel appeared normal. The distended portion was dark in colour, but had not lost its natural lustre, and hot cloths being applied it soon regained its normal appearance. The abdomen was closed and the patient made a good recovery.

In giving his history he spoke of attacks to which he was subject and which he referred to as fainting spells and attacks of dizziness. Subsequent investigation showed these to be epileptic fits of the *petit mal* variety, but at the time they made the history still more confusing, as he referred them to some stomach disturbance and appeared to think that they were connected with the attacks of abdominal pain.

In neither of the cases had we any symptoms which might be termed diagnostic, nor is it usual to have any such symptoms in cases of volvulus. The only symptom which they had in common, outside

of the usual symptoms of obstruction, was the decubitus; both lay on the right side with the legs drawn up. It is easy to understand how, in a case of sigmoid flexure with a long mesentery, this condition may occur, but in the small intestine, even with an elongated mesentery, the mechanism is more difficult of explanation. The two ends of the sigmoid flexure are not far apart and the looseness of its attachments varies much in different subjects. If the loop of bowel is long and loosely attached, one limb of the flexure may be twisted over the other and so obstruction formed. This occurred in a case which I saw some years ago at the General Hospital.

Taking into consideration the frequency of hernia and the fact that this condition must always be more or less accompanied by elongation of the mesentery and that consequently this state of the attachments of the bowel is far from being uncommon, while according to all writers on surgery volvulus of the small intestine is a very uncommon occurrence, we cannot attach much importance to this point. In fact I have not come across any satisfactory explanation of why it should occur.

It may be questioned whether these were cases of volvulus at all. The total absence of bands or adhesions of any kind, the distinct points of constriction and the absence of inflammatory conditions practically rule out all other conditions. Besides this evidence by exclusion, in the second case there was more direct proof—the twist could be readily reproduced outside of the abdomen.

The happy result in these two cases, although I must admit the diagnosis was not made until the abdomen was opened, would encourage us to operate early in cases of obscure gastro-intestinal disease where we have symptoms of obstruction. In the second case the pronounced symptoms had only lasted four hours, yet the bowel was already turning black and before long would have become gangrenous. The mere drawing out of the bowel loosened the twist and no difficulty was experienced in returning the abdominal contents.

Up to the present time there has been no return in either case, seven months and two months respectively.

In concluding I wish to thank Dr. Armstrong for his kind assistance at both operations.